

CLAIMS

What I claim as my invention is:

1. An electromagnetic turbine without moving parts, comprised of;

a magnetic core with three magnetic paths and magnetic connectors arranged between the three paths forming two adjacent closed magnetic loops;

three coils extending individually around portions of said three magnetic paths;

said three coils electrically pulsed to provide current pulses in said coils;

driving electrical current through each of said three coils in sequence results in a flow of magnetic flux external to said magnetic core;

said sequence is arranged to create a continuous one-way flow of magnetic flux through the inside of said core, then out one end where said magnetic flux extends outward from said core and sweeps external to said core to the opposite end of said core where said flux collapses into said core;

said sweeping magnetic flux induces electrical currents into electrically conductive material external to and not part of said turbine;

magnetic flux from said external currents interacts with said sweeping flux, resulting in a net force; where,

said force absorbs energy from relative deceleration of external material, converting said deceleration to electrical energy; or,

electrical energy provides relative acceleration of external material, converting said energy to said acceleration.

2. The electromagnetic turbine of claim 1, wherein said magnetic core is comprised of a magnetically permeable material with a high saturation flux density and low core loss at high frequencies including;

a core material in laminated form using amorphous, nanocrystalline, grain-oriented, non-oriented, or other magnetically permeable alloys; or

a core material comprised of bound powdered, ceramic, or other magnetically permeable compounds; or

a core material comprised of air or other electrically insulating substance; or

a core material comprised of a vacuum.

3. The electromagnetic turbine of claim 1, wherein said coils are comprised of an electrically conductive material with a high current handling capability, low resistance, and electrical insulation between adjacent windings and said core, including;

copper or other metal or alloy with enamel or other electrically insulating coating or sheath; or

a non-metallic electrical conductor surrounded by electrically insulating material; or

a superconductor surrounded by electrically insulating material.

4. The electromagnetic turbine of claim 1, wherein said electrical signals are provided by a three-phase electrical source with controllable frequency, voltage and current allowing generation and regeneration of electrical power, including;

an electronically switched three-phase quasi-sine wave inverter without pulse width modulation control; or

an electronically switched three-phase sine wave inverter with pulse width modulation control; or

an electromechanical three-phase sine wave generator; or

an alternate three-phase sine wave or quasi-sine wave generator.